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17 December 2004

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Your Ref: PCT/IB2004/001887  
Title: IMPROVED DORSIFLEXION SHOE  
Applicant : Springboost S.A. et al

Our Ref: PWO-S011-001  
Filed: 02/06/2004

**AMENDMENTS UNDER ARTICLE 19 PCT**

Dear Sir,

In response to the International Search Report, Applicant wishes to submit the following marked amendments to the claims, according to the provisions of Article 19 of the PCT, as replacement sheets no. 13, attached:

In the Claims:

1. A high performance dorsiflexion shoe for enveloping a foot (40) of a wearer, including the wearer's metatarsal-phalangeal joint (20), the shoe comprising

(a) a sole portion (24) having a ground-contacting surface (26), a forefoot region (30), a midfoot region (32) and a heel portion (34), and

(b) a constraining device (16) above the metatarsal-phalangeal joint;

wherein the forefoot region is made of a high density material, and has a thickness, measured in a direction perpendicular to the ground-contacting surface of the sole portion, greater than the thickness of the heel portion, thereby defining a dorsiflexion shoe having a characteristic angle ( $\alpha$ ) of declination from the forefoot region to the heel portion;

wherein the constraining device substantially constrains a wearer's metatarsal-phalangeal joints from movement when exercising, ~~and~~

wherein the forefoot region has a curved form defined so as to further minimize flexion of the metatarsal-phalangeal joint during walking or running and

wherein the sole portion (24) is a component of a shell (12) which includes sidewall portions (22) extending upwardly from the sole portion.

2. The shoe of claim 1, wherein the ~~sole portion (24) is a component of a shell (12) which includes~~ sidewall portions (22) extending upwardly from the sole portion to a circumferential edge (13) which surrounds the wearer's foot (40).

3. The shoe of claim 2, wherein the circumferential edge (13) is higher in the heel region (34) than in the forefoot region (30), thus giving the outward appearance of a plantarflex shoe.

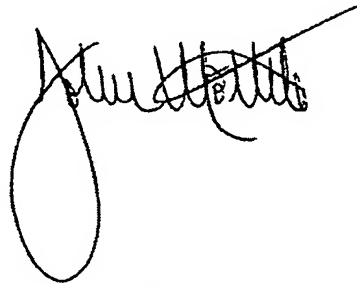
4. The shoe of claim 1, wherein the forefoot region (30) includes at least one hard, high density insert (66, 162, 180, 182, 184, 186, 190) formed to follow the curvature of the sole portion (24).

5. The shoe of claim 4, wherein the at least one insert (66, 162, 180, 182, 184, 186, 190) includes reinforcing ribs (90).

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If the Examiner has questions, the Undersigned may be contacted by phone at 022 747 7849, or by fax at 071 230 1001, or by email to [moetteli@email.com](mailto:moetteli@email.com).

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'John B. Moetteli', with a large, stylized loop at the end of the signature.

John B. Moetteli  
Patent Attorney

Enclosure: Replacement sheet 13

**What is claimed is:**

1. A high performance dorsiflexion shoe for enveloping a foot (40) of a wearer, including the wearer's metatarsal-phalangeal joint (20), the shoe comprising

(a) a sole portion (24) having a ground-contacting surface (26), a forefoot region (30), a midfoot region (32) and a heel portion (34), and

(b) a constraining device (16) above the metatarsal-phalangeal joint;

wherein the forefoot region is made of a high density material, and has a thickness, measured in a direction perpendicular to the ground-contacting surface of the sole portion, greater than the thickness of the heel portion, thereby defining a dorsiflexion shoe having a characteristic angle ( $\alpha$ ) of declination from the forefoot region to the heel portion;

wherein the constraining device substantially constrains a wearer's metatarsal-phalangeal joints from movement when exercising,

wherein the forefoot region has a curved form defined so as to further minimize flexion of the metatarsal-phalangeal joint during walking or running and

wherein the sole portion (24) is a component of a shell (12) which includes sidewall portions (22) extending upwardly from the sole portion.

2. The shoe of claim 1, wherein the sidewall portions (22) extend upwardly from the sole portion to a circumferential edge (13) which surrounds the wearer's foot (40).

3. The shoe of claim 2, wherein the circumferential edge (13) is higher in the heel region (34) than in the forefoot region (30), thus giving the outward appearance of a plantarflex shoe.

4. The shoe of claim 1, wherein the forefoot region (30) includes at least one hard, high density insert (66, 162, 180, 182, 184, 186, 190) formed to follow the curvature of the sole portion (24).

5. The shoe of claim 4, wherein the at least one insert (66, 162, 180, 182, 184, 186, 190) includes reinforcing ribs (90).